

## Transcribed Excerpts from Letter from Dr. Luis Alvarez to his Son about the Atomic Bomb, August 6, 1945

## Dear Walter:

This is the first grown-up letter I have ever written to you, and it is really for you to read when you are older. During the last few hours I have been thinking of you and your mother and our little sister Jean. It was tough to take off on this flight, not knowing whether I would ever see any of you again. But lots of other fathers have been in the same spot many times before in this war, and I had a job to do, so I can't claim to be any sort of hero.

... The story of our mission will probably be well known to everyone by the time you read this, but at the moment only the crews of our three B-29s, and the unfortunate residents of the Hiroshima district in Japan are aware of what has happened to aerial warfare. Last week at the 20th Air Force, stationed in the Marianas Islands, put over the biggest bombing raid in history, with 6000 tons of bombs (about 3000 tons of high explosive). That means that the days of large bombing raids, with several hundred planes, are finished. A single plane disguised as a friendly transport can now wipe out a city. That means to me that nations will have to get along together in a friendly fashion, or suffer the consequences of sudden sneak attacks which can cripple them overnight.

What regrets I have about being a party to killing and maiming thousands of Japanese civilians this morning are tempered with the hope that this terrible weapon we have created may bring the countries of the world and prevent further wars. Alfred Nobel thought that his invention of high explosives would have that effect, by making wars too terrible, but unfortunately it had just the opposite reaction. Our new destructive force is so many thousands of times worse that it may realize Nobel's dream.

... We arrived at the plane an hour and a half early, as there were lots of historic pictures to be taken with the aid of a big batter of lights. It looked just like the opening of a gas station in Hollywood. We had our pictures taken in front of the place which held the big bomb in its bombbay, and then went to our own plane. By this time all my tension had gone away and I haven't felt any since, with the exception of a little tingling sensation when the Japanese shores appeared on the horizon. All of the civilians had thought we would be scared over the empire, but I can say truthfully that I was completely at ease, and so were my two companions. We weren't excited, as we were too busy with our work. After the bomb was dropped we made an accordingly sharp turn to get away from the blast. We got 2 g's, which made our 80 pounds weigh 160.

A few moments after we completed the turn, the plane was hit with the blast wave from the explosion. It gave the ship a couple of good jolts, but only about what we expected. We went to the portholes to see the results of the explosion. It was awe-inspiring. Already the smoke cloud was up to 35 or 50,000 feet. The ground was covered with a layer of smoke so that the city was blotted out from view. I forgot to mention the most spectacular effect of all — the light flash. It was many times brighter than the sun when we were seven miles away. I had looked at it directly, through dark glasses, on the trial shot in New Mexico last month.